

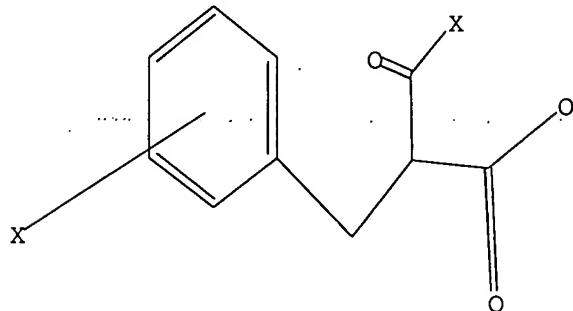
=> .  
Uploading C:\Program Files\Stnexp\Queries\185c.str

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 12:09:59 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 207 TO ITERATE

100.0% PROCESSED 207 ITERATIONS  
SEARCH TIME: 00.00.03

1 ANSWERS

L2 1 SEA SSS FUL L1

L3 1 L2

=> d ibib abs hitstr

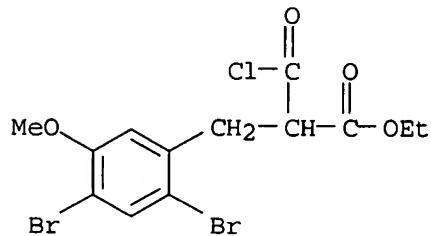
L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1990:423504 CAPLUS  
DOCUMENT NUMBER: 113:23504  
TITLE: Marine bacteria. II. Synthesis of cyclic and steric hindered pseudilines  
AUTHOR(S): Pudleiner, Heinz; Laatsch, Hartmut  
CORPORATE SOURCE: Inst. Org. Chem., Univ. Goettingen, Goettingen,  
D-3400, Germany  
SOURCE: Liebigs Annalen der Chemie (1990), (5), 423-32  
CODEN: LACHDL; ISSN: 0170-2041  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
OTHER SOURCE(S): CASREACT 113:23504  
GI For diagram(s), see printed CA Issue.  
AB The pentabromopseudilin (I, R = H) analogs I (R = Br) and II were prepared  
II was obtained from 8-hydroxy-1-tetralone via Paal-Knorr cyclization of  
the tetralone III.  
IT 125714-95-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and chlorination of)

RN 125714-95-6 CAPLUS

CN Benzenepropanoic acid, 2,4-dibromo- $\alpha$ -(chlorocarbonyl)-5-methoxy-, ethyl ester (9CI) (CA INDEX NAME)



=>

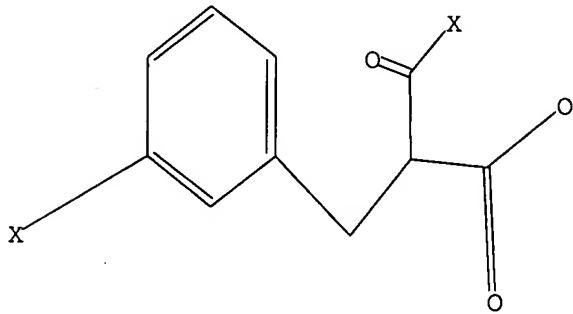
=>  
Uploading C:\Program Files\Stnexp\Queries\185a.str

L10 STRUCTURE UPLOADED

=> d

L10 HAS NO ANSWERS

L10 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l10

SAMPLE SEARCH INITIATED 10:32:24 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1 TO 80  
PROJECTED ANSWERS: 0 TO 0

L11 0 SEA SSS SAM L10

=> s l10 full  
FULL SEARCH INITIATED 10:32:36 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 68 TO ITERATE

100.0% PROCESSED 68 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

L12 0 SEA SSS FUL L10

=>

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**PASSWORD:**

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\* \* \* \* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \* \* \* \* \*

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NEWS 3 SEP 01 New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!  
NEWS 4 OCT 28 KOREPAT now available on STN  
NEWS 5 NOV 30 PHAR reloaded with additional data  
NEWS 6 DEC 01 LISA now available on STN  
NEWS 7 DEC 09 12 databases to be removed from STN on December 31, 2004  
NEWS 8 DEC 15 MEDLINE update schedule for December 2004  
NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness alerts (SDIS) affected  
NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness alerts (SDIS) affected  
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIS) affected  
NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness alerts (SDIS) affected  
NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB  
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN  
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED  
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and February 2005  
NEWS 17 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered  
NEWS 18 FEB 10 STN Patent Forums to be held in March 2005  
NEWS 19 FEB 16 STN User Update to be held in conjunction with the 229th ACS National Meeting on March 13, 2005  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
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FILE 'HOME' ENTERED AT 10:19:44 ON 28 FEB 2005

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

ENTRY

TOTAL

SESSION

0.21

0.21

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 10:19:51 ON 28 FEB 2005

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FILE COVERS 1907 - 28 Feb 2005 VOL 142 ISS 10

FILE LAST UPDATED: 27 Feb 2005 (20050227/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>

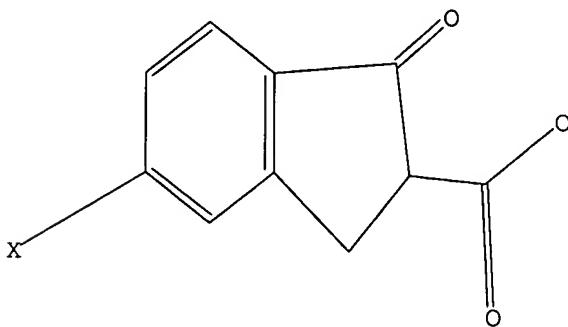
Uploading C:\Program Files\Stnexp\Queries\185.str

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 10:20:47 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 2075 TO ITERATE

48.2% PROCESSED 1000 ITERATIONS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 38768 TO 44232  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

L3 0 L2

=> s 11 full  
**REGISTRY INITIATED**

Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 10:20:53 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 42783 TO ITERATE

100.0% PROCESSED 42783 ITERATIONS 31 ANSWERS  
SEARCH TIME: 00.00.01

L4 31 SEA SSS FUL L1

L5 36 L4

=> s 15 and acid halide  
3941972 ACID  
146913 HALIDE  
1932 ACID HALIDE  
(ACID(W) HALIDE)

L6 0 L5 AND ACID HALIDE

=> s 15 and halide  
146913 HALIDE  
L7 0 L5 AND HALIDE

=> s 15 and acid  
3941972 ACID  
L8 25 L5 AND ACID

=> s 18 and py<2003  
22588982 PY<2003  
L9 21 L8 AND PY<2003

=> d 1-10 ibiB abs hitstr

L9 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2001:915253 CAPLUS  
DOCUMENT NUMBER: 136:183796  
TITLE: Toward the manufacture of indoxacarb  
AUTHOR(S): Shapiro, R.; Annis, G. D.; Blaisdell, C. T.; Dumas, D.  
J.; Fuchs, J.; Griswold, S. M.; Highley, G. W., Jr.;  
Hollinsed, W. C.; Mrowca, J. J.; Sternberg, J. A.;  
Wojtkowski, P.  
CORPORATE SOURCE: Agricultural Products Department, Process Development  
Group, Stine-Haskell Research Center, DuPont, Newark,  
DE, 19714, USA  
SOURCE: ACS Symposium Series (2002), 800 (Synthesis  
and Chemistry of Agrochemicals VI), 178-185  
CODEN: ACSMC8; ISSN: 0097-6156  
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 136:183796  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The discovery and development of a novel process for the preparation of (+)-indoxacarb I is described. The key step in the preparation of I is the unprecedented enantioselective hydroxylation of the methoxycarbonylindanone II with tert-Bu hydroperoxide in the presence of cinchonine to give the hydroxyindanonecarboxylate III in 50% ee. While the initial synthesis of the racemate of I used the condensation reaction of the hydrazone of racemic III with carbamoyl chloride IV followed by cyclocondensation with diethoxymethane to prepare the title compound, the enhanced solubility of nonracemic III and subsequent derivs. forced significant process refinements in the synthesis of I. Nonracemic I was ultimately prepared by condensation of III with benzyl carbazate, condensation of the benzyloxycarbonyl hydrazone with diethoxyethane in the presence of p-toluenesulfonic acid in toluene (with distillation of the ethanol byproduct), deprotection, and acylation with IV to provide nonracemic I; the final three steps were all performed in toluene as the solvent and gave I in 80% yield over the three steps.

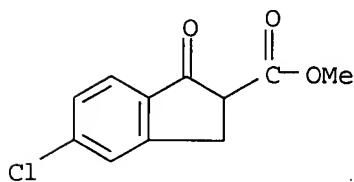
IT 399572-29-3P 399572-30-6P  
RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(improved toluene solubility of the triethylammonium salt of methoxycarbonylindanone intermediate over the sodium salt in preparation of racemic indoxacarb)

RN 399572-29-3 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

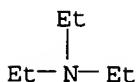
CM 1

CRN 65738-56-9  
CMF C11 H9 Cl O3



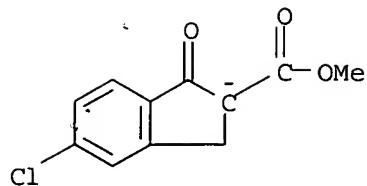
CM 2

CRN 121-44-8  
CMF C6 H15 N



RN 399572-30-6 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester, ion(1-), sodium (9CI) (CA INDEX NAME)



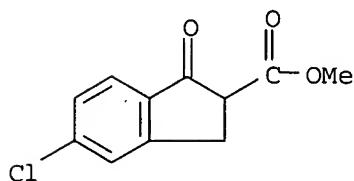
● Na<sup>+</sup>

IT 65738-56-9P 173903-18-9P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and process refinements in preparation of nonracemic indoxacarb using cinchonine-catalyzed asym. hydroxylation of methoxycarbonylindanone as key step)

RN 65738-56-9 CAPLUS

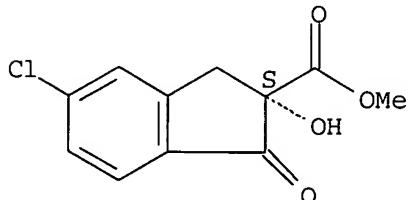
CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



RN 173903-18-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

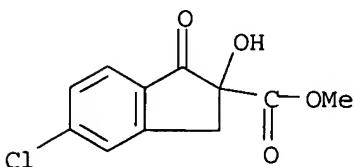


IT 144172-24-7P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (process for the preparation of racemic indoxacarb)

RN 144172-24-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT:

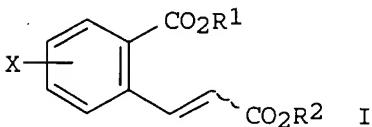
5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:15666 CAPLUS  
 DOCUMENT NUMBER: 132:49800  
 TITLE: Preparation of cinnamates as intermediates for  
       indanonecarboxylates.  
 INVENTOR(S): Lange, Walter; Komoschinski, Joachim; Steffan, Guido;  
               Kysela, Ernst  
 PATENT ASSIGNEE(S): Bayer A.-G., Germany  
 SOURCE: Ger., 8 pp.  
 CODEN: GWXXAW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19837069	C1	20000105	DE 1998-19837069	19980817 <--
CA 2340738	AA	20000302	CA 1999-2340738	19990809 <--
WO 2000010963	A1	20000302	WO 1999-EP5735	19990809 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9954212	A1	20000314	AU 1999-54212	19990809 <--
EP 1105367	A1	20010613	EP 1999-940172	19990809 <--
EP 1105367	B1	20030618		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002523392	T2	20020730	JP 2000-566237	19990809 <--
AT 243185	E	20030715	AT 1999-940172	19990809
US 6455725	B1	20020924	US 2001-762838	20010213 <--
PRIORITY APPLN. INFO.:			DE 1998-19837069	A 19980817
			WO 1999-EP5735	W 19990809

OTHER SOURCE(S): MARPAT 132:49800  
 GI

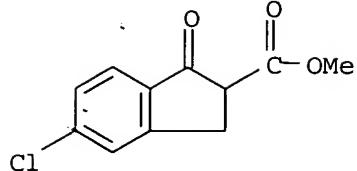


AB Title compds. [I; X = F, Cl, iodo; R1, R2 = H, (substituted) alkyl, PhCH<sub>2</sub>], were prepared. Thus, 2-amino-4-chlorobenzoic acid in MeOH/H<sub>2</sub>SO<sub>4</sub> was treated with a mixture prepared from NaNO<sub>2</sub>, MeOH, and H<sub>2</sub>O in H<sub>2</sub>SO<sub>4</sub>; amidinosulfonic acid was added and excess Me nitrite was blown off. Me acrylate and Pd acetylacetone were added to give Me 4-chloro-2-(3-methoxy-3-oxo-1-propenyl)benzoate. The Pd-containing product was hydrogenated in an autoclave to give 4-chloro-2-(3-methoxy-3-oxopropyl)benzoate, which was heated with NaOMe in MeOH to give 2-methoxycarbonyl-5-chloroindan-1-one.

IT 65738-56-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
       (preparation of cinnamates as intermediates for indanonecarboxylates)

RN 65738-56-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester  
 (9CI) (CA INDEX NAME)

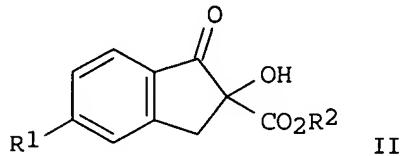
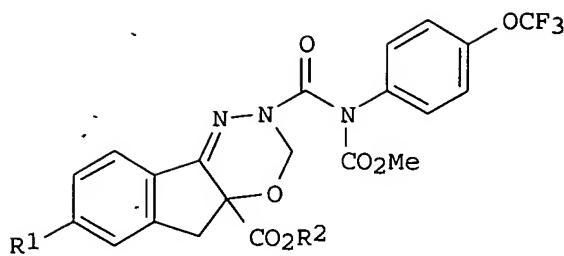


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1999:109412 CAPLUS  
 DOCUMENT NUMBER: 130:168398  
 TITLE: Preparation of fused oxadiazines.  
 INVENTOR(S): Annis, Gary David; McCann, Stephen Frederick; Shapiro, Rafael  
 PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA  
 SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 230,568,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5869657	A	19990209	US 1996-727607	19961016 <--
CA 2188400	AA	19951102	CA 1995-2188400	19950417 <--
CN 1146205	A	19970326	CN 1995-192654	19950417 <--
CN 1059901	B	20001227		
HU 75052	A2	19970328	HU 1996-2885	19950417 <--
HU 214902	B	19980728		
EP 1048647	A1	20001102	EP 2000-113734	19950417 <--
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE, PT				
IN 187492	A	20020504	IN 1995-CA411	19950417 <--
PT 756594	T	20020628	PT 1995-915601	19950417 <--
ES 2171537	T3	20020916	ES 1995-915601	19950417 <--
HU 221609	B	20021128	HU 1998-1346	19950417 <--
EP 1357107	A1	20031029	EP 2003-7459	19950417
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE, PT				
IL 113412	A1	20031031	IL 1995-113412	19950418
TW 477790	B	20020301	TW 1995-84104553	19950508 <--
AU 9852168	A1	19980423	AU 1998-52168	19980120 <--
AU 714304	B2	19991223		
US 6018071	A	20000125	US 1998-165651	19981002 <--
US 6080856	A	20000627	US 1999-422631	19991021 <--
CN 1282739	A	20010207	CN 2000-103632	20000223 <--
US 6232489	B1	20010515	US 2000-567639	20000509 <--
PRIORITY APPLN. INFO.:			US 1994-230568	B2 19940420
			US 1994-298909	B2 19940831
			EP 1995-915601	A3 19950417
			EP 2000-113734	A3 19950417
			HU 1996-2885	A 19950417
			WO 1995-US4321	A1 19950417
			US 1996-727607	A3 19961016
			US 1998-165651	A3 19981002
			US 1999-422631	A3 19991021

OTHER SOURCE(S): CASREACT 130:168398; MARPAT 130:168398  
 GI



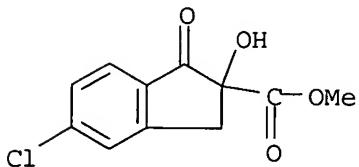
**AB** (chiral) fused oxadiazines (I; R1 = F, Cl, fluoroalkoxy; R2 = alkyl), were prepared from ketones (II; variables as above) by sequential treatment with H<sub>2</sub>NNHR<sub>3</sub> (R<sub>3</sub> = protecting group, e.g. CO<sub>2</sub>CH<sub>2</sub>Ph) in the presence of acid catalyst, cyclization with a dialkoxyymethane in the presence of Lewis acid, hydrogenolysis, and acylation with ClCON(CO<sub>2</sub>Et)C<sub>6</sub>H<sub>4</sub>OCF<sub>3</sub>-p (III). Thus, II N<sub>2</sub>NNHCO<sub>2</sub>CH<sub>2</sub>Ph, and p-TsOH were refluxed in MeOH to give 96% phenylmethyl Z-(5-chloro-2,3-dihydro-2-hydroxy-2-methylcarbonyl-1H-inden-1-ylidene)hydrazinecarboxylate. The latter was heated with diatomaceous earth, (MeO)<sub>2</sub>CH<sub>2</sub>, and P<sub>2</sub>O<sub>5</sub> in C<sub>1</sub>CH<sub>2</sub>CH<sub>2</sub>C<sub>1</sub> to give 89% 4a-Me 2-phenylmethyl 7-chloroindeno[1,2-e] [1,3,4]oxadiazine-2,4a(3H,5H)-dicarboxylate. This was hydrogenolyzed over Pd/C and the unisolated product was stirred with III in MeOAc/aqueous NaHCO<sub>3</sub> to give 85% I (R1 = Cl; R2 = Me).

**IT** 144172-24-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of fused oxadiazines)

**RN** 144172-24-7 CAPLUS

**CN** 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

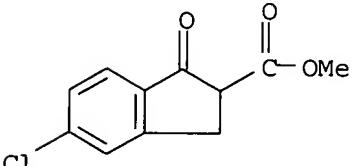


**IT** 65738-56-9P 173903-18-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of fused oxadiazines)

**RN** 65738-56-9 CAPLUS

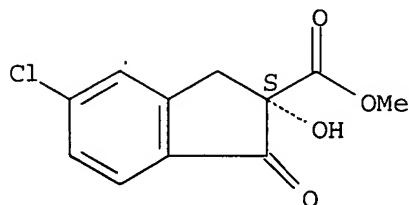
**CN** 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



**RN** 173903-18-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:795156 CAPLUS

DOCUMENT NUMBER: 130:51408

TITLE: Methods and precursors for the production of chiral vicinal amino alcohols

INVENTOR(S): Rozzell, J. David, Jr.

PATENT ASSIGNEE(S): Biocatalytics, Inc., USA

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854350	A1	19981203	WO 1998-US10792	19980527 <--
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5834261	A	19981110	US 1997-863900	19970527 <--
US 5942644	A	19990824	US 1997-929474	19970915 <--
EP 991772	A1	20000412	EP 1998-923813	19980527 <--
R: CH, DE, FR, GB, IT, LI, NL				
PRIORITY APPLN. INFO.:			US 1997-863900	A 19970527
			US 1997-929474	A 19970915
			WO 1998-US10792	W 19980527

OTHER SOURCE(S): CASREACT 130:51408; MARPAT 130:51408

AB The disclosure describes a method for the preparation of chiral vicinal aminoalcs. in high optical purity. The method combines the stereoselective reduction of the keto group of a  $\beta$ -keto acid,  $\beta$ -keto ester, or derivative with the stereospecific rearrangement of the corresponding amide, hydroxamic acid, or hydrazide to produce chiral vicinal amino alcs. with control of stereochem. at both chiral centers. The method involves novel precursor compds.

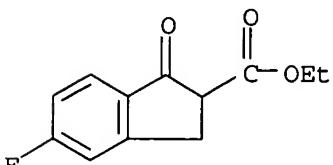
IT 149775-09-7

RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)

(methods and precursors for the production of chiral vicinal amino alcs.)

RN 149775-09-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-fluoro-2,3-dihydro-1-oxo-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT:

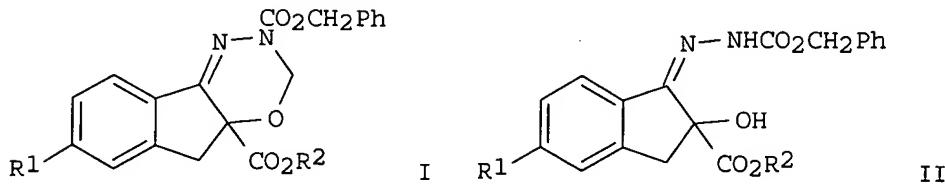
2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1998:112357 CAPLUS  
 DOCUMENT NUMBER: 128:167448  
 TITLE: Preparation of indeno[1,2-e][1,3,4]oxadiazinedicarboxylates.  
 INVENTOR(S): Dumas, Donald J.  
 PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA; Dumas, Donald J.  
 SOURCE: PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805656	A1	19980212	WO 1997-US13548	19970731 <--
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
IN 182799	A	19990724	IN 1997-CA1020	19970602 <--
ZA 9705379	A	19981218	ZA 1997-5379	19970618 <--
AU 9739038	A1	19980225	AU 1997-39038	19970731 <--
EP 922041	A1	19990616	EP 1997-936346	19970731 <--
R: ES, FR, IT				
BR 9711003	A	19990817	BR 1997-11003	19970731 <--
CN 1226891	A	19990825	CN 1997-196880	19970731 <--
JP 2001501916	T2	20010213	JP 1998-508080	19970731 <--
MX 9901054	A	20000131	MX 1999-1054	19990128 <--
US 1950	H1	20010306	US 1999-230987	19990203 <--
PRIORITY APPLN. INFO.:			US 1996-22426P	P 19960805
			WO 1997-US13548	W 19970731

OTHER SOURCE(S): CASREACT 128:167448; MARPAT 128:167448

GI



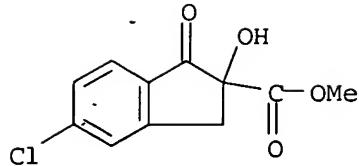
AB Title compds. (I; R1 = F, Cl, fluoralkoxy; R2 = alkyl) are prepared by reaction of hydrazine derivs. (II; R1, R2 as above) with  $\geq 1$  equivalent dialkoxymethane in the presence of a protic acid catalyst in an inert solvent under conditions which allow for the prompt removal of the alc. byproduct by distillation. Thus, a slurry of p-toluenesulfonic acid and II (R1 = Cl; R2 = Me) was added over 2 h to a refluxing mixture of (EtO)2CH2 in PhMe with distillation of EtOH/PhMe to give 87% I (R1 = Cl; R2 = Me).

IT 144172-24-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of indeno[1,2-e][1,3,4]oxadiazinedicarboxylates)

RN 144172-24-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:754405 CAPLUS

DOCUMENT NUMBER: 126:46360

TITLE: Enzymic process for the preparation of chiral  $\alpha$ -tertiary carboxylic acid esters

INVENTOR(S): Sariaslani, Fateme S.; Stieglitz, Barry; Witterholt, Vincent G.

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 321,496, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5580783	A	19961203	US 1995-457891	19950601 <--
WO 9612035	A1	19960425	WO 1995-US13225	19951004 <--
	W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, US, UZ, VN RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9538329	A1	19960506	AU 1995-38329	19951004 <--
EP 786012	A1	19970730	EP 1995-936341	19951004 <--
EP 786012	B1	19981223		
	R: BE, CH, DE, DK, ES, FR, GB, LI, NL			
CN 1160421	A	19970924	CN 1995-195592	19951004 <--
JP 10507360	T2	19980721	JP 1995-513397	19951004 <--
ES 2128093	T3	19990501	ES 1995-936341	19951004 <--
ZA 9508612	A	19970414	ZA 1995-8612	19951012 <--
IL 115594	A1	20000131	IL 1995-115594	19951012 <--
PRIORITY APPLN. INFO.:			US 1994-321496	B2 19941012
			US 1995-457891	A2 19950601
			WO 1995-US13225	W 19951004

OTHER SOURCE(S): MARPAT 126:46360

AB This invention provides a process for enrichment of enantiomers of  $\alpha$ -tertiary carboxylic acid esters from mixts. of corresponding esters using a biocatalyst comprising microbial cells or partially or highly purified enzyme preps. The enantiomeric ester products are useful as intermediates for the preparation of pharmaceutically and agriculturally active compds.

IT 173903-18-9P, 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (+)-

177746-84-8P, 1H-Indene-2-carboxylic acid,

5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (-)-

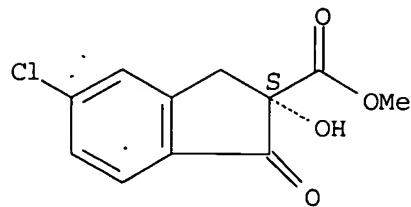
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)

(enzymic process for the preparation of chiral  $\alpha$ -tertiary carboxylic acid esters)

RN 173903-18-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

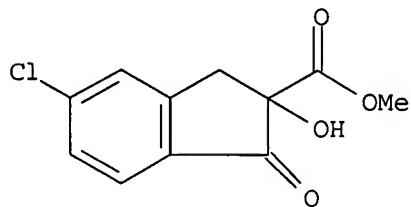
Absolute stereochemistry. Rotation (+).



RN 177746-84-8 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

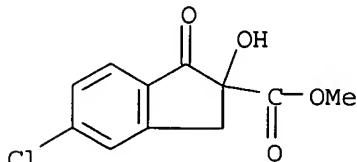


IT 144172-24-7

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(enzymic process for the preparation of chiral  $\alpha$ -tertiary carboxylic acid esters)

RN 144172-24-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:365854 CAPLUS

DOCUMENT NUMBER: 125:32081

TITLE: Enzymic process for the preparation of chiral  $\alpha$ -tertiary carboxylic acid esters

INVENTOR(S): Sariaslani, Fateme Sima; Stieglitz, Barry; Witterholt, Vincent G.

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9612035	A1	19960425	WO 1995-US13225	19951004 <--
W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, US, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,				

SN, TD, TG				
US 5580783	A	19961203	US 1995-457891	19950601 <--
AU 9538329	A1	19960506	AU 1995-38329	19951004 <--
EP 786012	A1	19970730	EP 1995-936341	19951004 <--
EP 786012	B1	19981223		
R: BE, CH, DE, DK, ES, FR, GB, LI, NL				
JP 10507360	T2	19980721	JP 1995-513397	19951004 <--
US 1994-321496 A2 19941012				
US 1995-457891 A2 19950601				
WO 1995-US13225 W 19951004				

PRIORITY APPLN. INFO.:

AB This invention provides a process for enrichment of enantiomers of  $\alpha$ -tertiary carboxylic acid esters from mixts. of corresponding esters using a biocatalyst comprising microbial cells, or partially or highly purified enzyme preps. The enantiomeric ester products are useful as intermediates for the preparation of pharmaceutically and agriculturally active compds.

IT 173903-18-9P 177746-84-8P

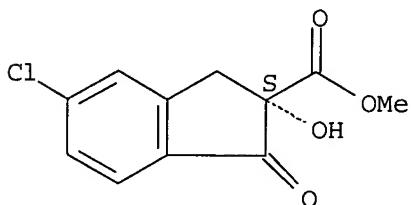
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); PUR (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(enzymic process for the preparation of chiral  $\alpha$ -tertiary carboxylic acid esters)

RN 173903-18-9 CAPPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

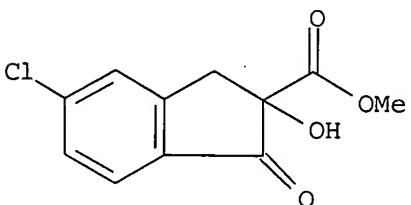
Absolute stereochemistry. Rotation (+).



RN 177746-84-8 CAPPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



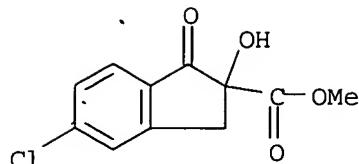
IT 144172-24-7P

RL: BPR (Biological process); BSU (Biological study, unclassified); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(enzymic process for the preparation of chiral  $\alpha$ -tertiary carboxylic acid esters)

RN 144172-24-7 CAPPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:858527 CAPLUS

DOCUMENT NUMBER: 123:256333

TITLE: Preparation of novel 2-amino-1-phenylethanol compounds with activity for regulating gastrointestinal tract movement

INVENTOR(S): Tsuchiya, Susumu; Hiratsuka, Kozo; Fukuzaki, Atsushi; Takenawa, Noriko; Osaka, Kazuya; Miura, Yasuyuki

PATENT ASSIGNEE(S): Tokyo Tanabe Co. Ltd., Japan

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

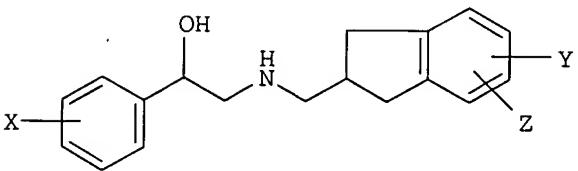
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

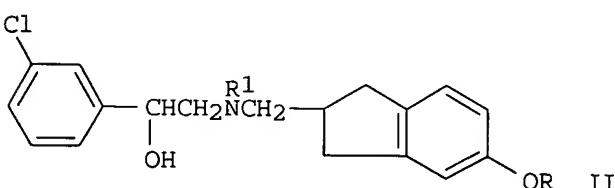
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9508527	A1	19950330	WO 1994-JP1551	19940921 <--
W: AU, CA, JP, KR, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9476658	A1	19950410	AU 1994-76658 JP 1993-236562 JP 1994-93627 WO 1994-JP1551	19940921 <-- A 19930922 A 19940506 W 19940921
PRIORITY APPLN. INFO.:				

OTHER SOURCE(S): MARPAT 123:256333

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I



OR II

AB Novel N-indanyl methyl-2-amino-1-phenylethanol compds. represent by general formula [I; X = H, halo, CF<sub>3</sub>; Y, Z = H, HO, lower alkoxy, MeO having a linear or branched C<sub>1</sub>-3 alkylene chain which may be substituted by lower alkoxy carbonyl, EtO which may be substituted at the 2-position, or a group represent OCH<sub>2</sub>COA; wherein A = lower alkyl, Ph, cyclic amino or an amino group represented by NVW (wherein V, W = H or lower alkyl); provided that Y and Z may be adjacent to each other and combined together to represent OC(BB)O (wherein B = CO<sub>2</sub>H or lower alkoxy carbonyl)] or pharmacol. acceptable salts thereof, useful for treating or preventing exacerbation of gastrointestinal tract movement, are prepared Thus, (5-methoxyindan-2-ylmethyl)amine was condensed with m-chloromandelic acid by using BOP and Et<sub>3</sub>N in CH<sub>2</sub>Cl<sub>2</sub> to give N-(5-methoxyindan-2-ylmethyl)-3-chloromandelamide which was reduced by Me<sub>2</sub>S.BH<sub>3</sub> in refluxing THF to

N-(indanyl methyl)phenylaminoethanol (II; R = Me, R1 = H). The latter compound was treated with BBr3 in CH2Cl2 at -40° to room temperature to give II (R = R1 = H) which was acylated by di-tert-Bu dicarbonate in DMF containing Et3N to give II (R = H, R1 = CO2CMe3). This was refluxed with Et bromoacetate and K2CO3 in acetone and treated with a saturated methanolic HCl solution and then with a saturated NaHCO3 to give II (R = CH2CO2Et, R1 = H). (1R,2'S)- and (1R,2'R)-II.HCl (CH2CONHET, R1 = H) at 10 mg/kg p.o. inhibited 100% diarrhea induced by water-emersion of bound rats.

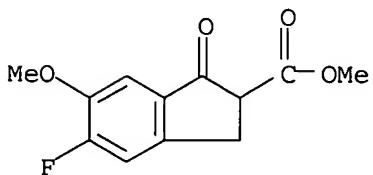
IT 169031-93-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate for preparation of [(indanyl methyl)amino]phenylethanol derivs. for regulating gastrointestinal tract movement)

RN 169031-93-0 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-fluoro-2,3-dihydro-6-methoxy-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:695929 CAPLUS

DOCUMENT NUMBER: 123:83378

TITLE: Arthropodicidal fused tetrahydropyridazines

INVENTOR(S): Harrison, Charles R.; Lahm, George P.; Stevenson, Thomas M.

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

SOURCE: U.S., 52 pp. Cont.-in-part of U.S. Ser. No. 570,103, abandoned.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5380718	A	19950110	US 1992-945965	19921112 <--
WO 9117983	A1	19911128	WO 1991-US2836	19910430 <--
W: AU, BB, BG, BR, CA, FI, HU, JP, KR, LK, MC, MG, MW, NO, PL, RO, SD, SU, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG				
ZA 9103549	A	19921230	ZA 1991-3549	19910510 <--
US 5591729	A	19970107	US 1995-368566	19950104 <--
PRIORITY APPLN. INFO.:				
		US 1990-523697	B2	19900515
		US 1990-570103	B2	19900817
		WO 1991-US2836	W	19910430
		US 1992-945965	A3	19921112

OTHER SOURCE(S): MARPAT 123:83378

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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Arthropodicidal tetrahydropyridazines of formulas QC(:X)NYG and ZC(X1):NG where Q is selected from the group I-VI, A and E are taken together to form V; V is selected from, e.g., CH2, CH2CH2, O, S, SO, SO2; G is selected from the group VII-XV; X = O, S, NX2; X1 = e.g., Cl, Br, OR12; X2

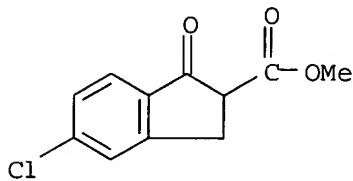
= e.g., R12, OH, OR12; Y = e.g., H, C1-6 alkyl, benzyl optionally substituted by W; R1, R2 = e.g., H, C1-6 alkyl, C1-6 haloalkyl; R3 = e.g., H, J, N3; J = e.g., pyridyl, thiienyl, furanyl; R4 = e.g., H, halo, C1-6-alkyl; R5, R7 = H, C1-2 alkyl; R6 = e.g., H, C1-6 alkyl; R4R5 and R6R7 can = :O; R8 = H, C1-2 alkyl; R9 = H, C1-2 alkyl, C1-2 alkylcarbonyl; R10 = e.g., H, C1-4 alkyl, C1-4 haloalkyl; R12 = thus e.g., C1-3 alkyl, benzyl; W = e.g., halo, CN, NO<sub>2</sub>; m = 1 to 3; n = 1 to 3; u = 1 or 2; Z = C or N. Thus, e.g., reaction of 2,4,4a,5-tetrahydro-3H-indeno[1,2-c]pyridazin-3-one (preparation given) with  $\alpha,\alpha,\alpha$ -trifluoro-p-tolyl isocyanate afforded tetrahydropyridazine XVI which demonstrated greater than or equal to 80% mortality against fall armyworm, southern corn rootworm, and boll weevil.

IT 65738-56-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(arthropodicidal fused tetrahydropyridazines)

RN 65738-56-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

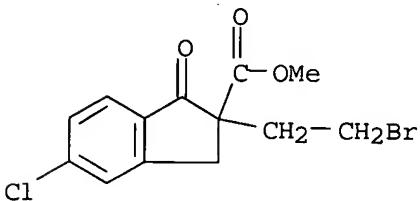


IT 139991-92-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(arthropodicidal fused tetrahydropyridazines)

RN 139991-92-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 2-(2-bromoethyl)-5-chloro-2,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:134276 CAPLUS

DOCUMENT NUMBER: 120:134276

TITLE: Agrochemical arthropodicidal amides

INVENTOR(S): Amoo, Victor Ekow; Annis, Gary David; March, Robert William, Jr.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: PCT Int. Appl., 129 pp.

DOCUMENT TYPE: CODEN: PIXXD2

LANGUAGE: Patent

FAMILY ACC. NUM. COUNT: English

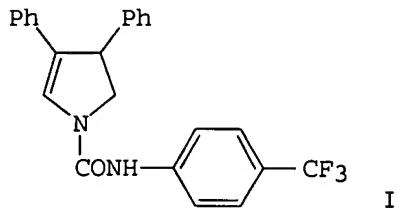
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9319045	A1	19930930	WO 1993-US2434	19930318 <-
W: AU, BR, BG, BR, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				

AU 9338118	A1 19931021	AU 1993-38118	19930318 <--
EP 632803	A1 19950111	EP 1993-907555	19930318 <--
EP 632803	B1 19981209		
R: ES, FR, IT			
JP 07507276	T2 19950810	JP 1993-516702	19930318 <--
JP 3446052	B2 20030916		
BR 9306225	A 19980630	BR 1993-6225	19930318 <--
ES 2127270	T3 19990416	ES 1993-907555	19930318 <--
CN 1098093	A 19950201	CN 1993-116861	19930726 <--
US 5514678	A 19960507	US 1994-307572	19940922 <--
PRIORITY APPLN. INFO.:		US 1992-858205	A2 19920326
		US 1992-875174	A2 19920428
		WO 1993-US2434	A 19930318

OTHER SOURCE(S): MARPAT 120:134276

GI



AB The title compds. QC(:X)N(Y)G [G = (un)substituted pyridyl, (un)substituted Ph, (un)substituted cyclohexyl, (un)substituted piperidino; Q = phenyldihydropyrrolyl, phenylheterocyclyl, etc.; X = O, S; Y = H, C1-6 alkyl, PhCH<sub>2</sub>, C2-6 alkenyl, C2-6 alkynyl, etc.], useful for the control of arthropods in both agronomic and nonagronomic environments, are prepared and their activity is demonstrated against a wide variety of arthropod species. Thus, dihydropyrrrole I (m.p. 200-201°) was prepared

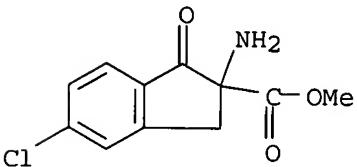
IT 144526-56-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of agrochem. arthropodicidal amides)

RN 144526-56-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 2-amino-5-chloro-2,3-dihydro-1-oxo-, methyl ester, hydrochloride (9CI) (CA INDEX NAME)



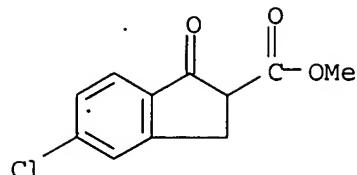
● HCl

IT 65738-56-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in preparation of agrochem. arthropodicidal amides)

RN 65738-56-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



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=> file stnguide
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY        SESSION
FULL ESTIMATED COST           61.55         224.87
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE      TOTAL
                                                ENTRY        SESSION
CA SUBSCRIBER PRICE            -7.30         -7.30
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FILE 'STNGUIDE' ENTERED AT 10:24:18 ON 28 FEB 2005  
 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
 AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: Feb 25, 2005 (20050225/UP).

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=> file caplus
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
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FULL ESTIMATED COST           0.18          225.05
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE      TOTAL
                                                ENTRY        SESSION
CA SUBSCRIBER PRICE            0.00          -7.30
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FILE 'CAPLUS' ENTERED AT 10:26:03 ON 28 FEB 2005  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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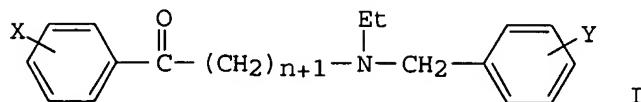
FILE COVERS 1907 - 28 Feb 2005 VOL 142 ISS 10  
 FILE LAST UPDATED: 27 Feb 2005 (20050227/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 11-20 ibiB abs hitstr

L9 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1993:559796 CAPLUS  
 DOCUMENT NUMBER: 119:159796  
 TITLE: Central cholinergic agents. IV. Synthesis and acetylcholinesterase inhibitory activities of  $\omega$ -[N-ethyl-N-(phenylmethyl)amino]-1-phenyl-1-alkanones and their analogs with partial

AUTHOR(S): conformational restriction  
 Ishihara, Yuji; Miyamoto, Masaomi; Nakayama, Takahiro;  
 Goto, Giichi  
 CORPORATE SOURCE: Pharm. Res. Div., Takeda Chem. Ind. Ltd., Osaka, 532,  
 Japan  
 SOURCE: Chemical & Pharmaceutical Bulletin (1993),  
 41(3), 529-38  
 DOCUMENT TYPE: CODEN: CPBTAL; ISSN: 0009-2363  
 Journal  
 LANGUAGE: English  
 GI

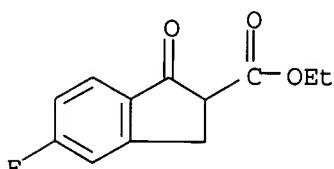


**AB** Inhibitors of acetylcholinesterase (AChE) have been designed based on a working hypothesis of the enzyme's active site. These compds., [N-ethyl-N-(phenylamino)]phenylalkanones I [X = 3,4-(OMe)2, 4-pyrrolidino, Y = 2-, 3-, 4-OMe, H, n = 3-6], were tested for their inhibitory activities on AChE and were found to be potent inhibitors. Various analogs of I were prepared to study the effect on AChE inhibition of partial restriction of conformation. Alkylation of RC6H4COCH2CO2Et [R = 4-F, 3,4-(OMe)2} with Br(CH2)nBr gave RC6H4COCH2(CO2Et)(CH2)nBr which were aminated with YC6H4CH2NHET to give I [X = 3,4-(OMe)2, Y = 2-OMe, n = 5, 4; X = 4-F, Y = 2-OMe, H, n = 4] (II). II (X = 4-F, Y = 2-OMe, H, n = 4) were treated with pyrrolidine to give the corresponding pyrrolidino derivs. Compds. with potent AChE inhibition were further evaluated in terms of central selectivity: the ratio of central action (ameliorating effect on scopolamine-induced memory impairment using a T-maze alternation task) to peripheral action.

**IT** 149775-09-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (alkylation of)

**RN** 149775-09-7 CAPLUS

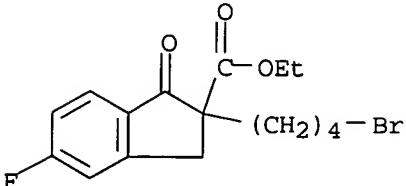
**CN** 1H-Indene-2-carboxylic acid, 5-fluoro-2,3-dihydro-1-oxo-, ethyl ester  
 (9CI) (CA INDEX NAME)



**IT** 132219-06-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and amination of)

**RN** 132219-06-8 CAPLUS

**CN** 1H-Indene-2-carboxylic acid, 2-(4-bromobutyl)-5-fluoro-2,3-dihydro-1-oxo-, ethyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1992:634026 CAPLUS  
 DOCUMENT NUMBER: 117:234026  
 TITLE: Preparation of indenooxadiazinecarboxamides as arthropodicides  
 INVENTOR(S): Annis, Gary David; Barnette, William Eldo; McCann, Stephen Frederick; Wing, Keith Dumont  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA  
 SOURCE: PCT Int. Appl., 351 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9211249	A1	19920709	WO 1991-US9164	19911217 <--
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, SD, SU, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
CA 2098612	AA	19920622	CA 1991-2098612	19911217 <--
CA 2098612	C	20020507		
AU 9191270	A1	19920722	AU 1991-91270	19911217 <--
AU 659121	B2	19950511		
EP 565574	A1	19931020	EP 1992-902235	19911217 <--
EP 565574	B1	19950802		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
HU 65223	A2	19940502	HU 1993-1808	19911217 <--
HU 213635	B	19970828		
JP 06504777	T2	19940602	JP 1991-502714	19911217 <--
BR 9107246	A	19940614	BR 1991-7246	19911217 <--
ES 2077392	T3	19951116	ES 1992-902235	19911217 <--
RU 2096409	C1	19971120	RU 1991-5011055	19911217 <--
ZA 9110002	A	19930621	ZA 1991-10002	19911219 <--
IL 100429	A1	19960119	IL 1991-100429	19911219 <--
CN 1062726	A	19920715	CN 1991-111730	19911221 <--
CN 1034468	B	19970409		
US 5462938	A	19951031	US 1993-75534	19930618 <--
US 5708170	A	19980113	US 1995-448086	19950523 <--
PRIORITY APPLN. INFO.:			US 1990-632438	A2 19901221
			US 1991-714401	A2 19910611
			WO 1991-US9164	A 19911217
			US 1993-75534	A3 19930618

OTHER SOURCE(S): MARPAT 117:234026

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. QC(:X)NYG and QX1C:NG [I and II; Q = Q1, Q2, etc.; A = H; E = H, C1-3 alkyl or AE = CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>, O, S, SO, SO<sub>2</sub>, OCH<sub>2</sub>, SCH<sub>2</sub>, etc.; G = (substituted) Ph, -pyridyl, -pyrimidyl, -thienyl, etc.; X = O, S, NX<sub>2</sub>; X<sub>1</sub> = Cl, Br, OR<sub>8</sub>, SR<sub>8</sub>, NR<sub>8</sub>R<sub>9</sub>; X<sub>2</sub> = R<sub>8</sub>, OH, OR<sub>8</sub>, cyano, SO<sub>2</sub>R<sub>8</sub>, SO<sub>2</sub>Ph, etc.; Y = H, C1-6 (halo)alkyl, CH<sub>2</sub>Ph, C2-6 alkoxyalkyl, C2-6 alkenyl, C2-6 alkynyl, C1-3 alkoxy, cyano, NO<sub>2</sub>, (substituted) Ph, etc.; Z = C, N; Z<sub>1</sub> = O, S, NR<sub>31</sub>; R<sub>2</sub> = H, (substituted) C1-6 alkyl, C2-6 (halo) alkenyl, C2-6 (halo)alkynyl, C3-6 (halo)cycloalkyl, halo, cyano, N<sub>3</sub>, etc. or R<sub>2</sub>R<sub>2</sub> = OCH<sub>2</sub>O, OCF<sub>2</sub>O, OCH<sub>2</sub>CH<sub>2</sub>O, etc.; R<sub>3</sub> = H, N<sub>3</sub>, NO<sub>2</sub>, halo, C1-6 (halo) alkyl, C2-6 alkenyl, (substituted) Ph, etc.; R<sub>4</sub>, R<sub>5</sub> = H, C1-4 alkyl, etc.; R<sub>4</sub>R<sub>5</sub> = O, S; R<sub>8</sub> = (substituted) C1-3 alkyl, C2-4 (halo) alkenyl, (substituted) benzyl, etc.; R<sub>9</sub> = H, C1-4 alkyl, C1-4 haloalkyl, C2-4 alkoxy carbonyl, (substituted) Ph, -pyridyl or R<sub>8</sub>R<sub>9</sub> = (CH<sub>2</sub>)<sub>4</sub>, (CH<sub>2</sub>)<sub>5</sub>, etc.; R<sub>31</sub> = H, C1-4 alkyl, C2-4 alkanoyl, C2-4 alkoxy carbonyl] were prepared for use in

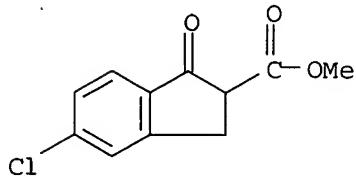
controlling anthropods, e.g. insects, pests, acari, etc. Thus, 5-chloro-2-(4-chlorophenyl)-2,3-dihydro-2-hydroxy-1H-inden-1-one (preparation given) was treated with hydrazine then 4-CF<sub>3</sub>C<sub>6</sub>H<sub>4</sub>NCO to give hydrazinecarboxamide III. The latter was cyclized with CH<sub>2</sub>O and TosOH to give title compound IV. IV at 0.55 kg/ha gave ≥80% control of Spodoptera frugiperda on wheat germ.

IT 65738-56-9P 144172-24-7P 144526-56-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediate for arthropodicides)

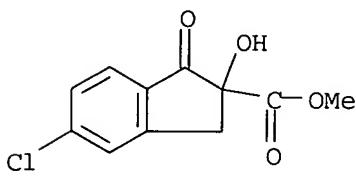
RN 65738-56-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester  
(9CI) (CA INDEX NAME)



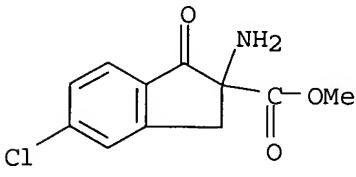
RN 144172-24-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-2-hydroxy-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



RN 144526-56-7 CAPLUS

CN 1H-Indene-2-carboxylic acid, 2-amino-5-chloro-2,3-dihydro-1-oxo-, methyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L9 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:531213 CAPLUS

DOCUMENT NUMBER: 117:131213

TITLE: Preparation of dihydropyridazinones and related compounds as fungicides

INVENTOR(S): Egan, Anne Ritchie; Michelotti, Enrique Luis; Ross, Ronald, Jr.; Wilson, Willie Joe

PATENT ASSIGNEE(S): Rohm and Haas Co., USA

SOURCE: Eur. Pat. Appl., 85 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

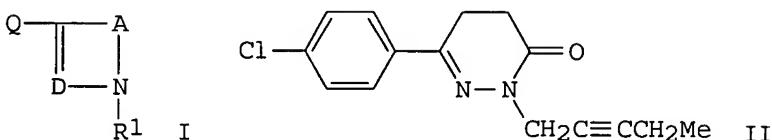
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 478195	A1	19920401	EP 1991-308404	19910913 <--
EP 478195	B1	19990526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 180475	E	19990615	AT 1991-308404	19910913 <--
ES 2131506	T3	19990801	ES 1991-308404	19910913 <--
CA 2051471	AA	19920322	CA 1991-2051471	19910916 <--
AU 9184602	A1	19920326	AU 1991-84602	19910919 <--
AU 651375	B2	19940721		
ZA 9107466	A	19920527	ZA 1991-7466	19910919 <--
HU 59379	A2	19920528	HU 1991-3020	19910920 <--
BR 9104043	A	19920602	BR 1991-4043	19910920 <--
JP 05025164	A2	19930202	JP 1991-241806	19910920 <--
JP 3166782	B2	20010514		
KR 204381	B1	19990615	KR 1991-16465	19910920 <--
IL 99542	A1	20010111	IL 1991-99542	19910920 <--
JP 2001139553	A2	20010522	JP 2000-341752	19910920 <--
JP 3408790	B2	20030519		
JP 2001181261	A2	20010703	JP 2000-342924	19910920 <--
JP 3408791	B2	20030519		
CN 1069729	A	19930310	CN 1991-110000	19911028 <--
CN 1038249	B	19980506		
JP 05286944	A2	19931102	JP 1992-62341	19920318 <--
JP 3242140	B2	20011225		
US 5552409	A	19960903	US 1994-221229	19940331 <--
US 5631254	A	19970520	US 1995-467384	19950606 <--
US 5753642	A	19980519	US 1995-462472	19950606 <--
US 5726176	A	19980310	US 1996-740546	19961030 <--
US 5726162	A	19980310	US 1996-741248	19961030 <--
US 5728698	A	19980317	US 1996-740548	19961030 <--
US 5728694	A	19980317	US 1996-740549	19961030 <--
US 5728715	A	19980317	US 1996-741249	19961030 <--
JP 2001172264	A2	20010626	JP 2000-342863	20001110 <--
JP 3364205	B2	20030108		

PRIORITY APPLN. INFO.:

US 1990-586633	A 19900921
US 1991-749576	A 19910828
JP 1991-241806	A3 19910920
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US 1994-221229	A3 19940331
US 1995-467384	A3 19950606

OTHER SOURCE(S): MARPAT 117:131213  
GI



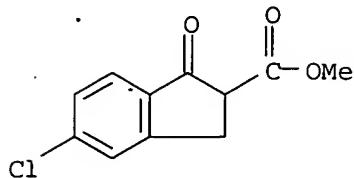
AB Title compds. I [A = (CHR<sub>2</sub>)<sub>n</sub>CHR<sub>7</sub>Z, (CHR<sub>2</sub>)<sub>n</sub>OZ, (CHR<sub>2</sub>)<sub>n</sub>SZ, OCHR<sub>7</sub>Z, etc.; n = 0-2; D = N, CR<sub>2</sub>; Q = (substituted) Ph, -naphthyl, -styryl, -pyridyl, -quinolyl, -indolyl, etc.; Z = CO, C:S; R<sub>1</sub> = (substituted) alkyl, -alkynyl, -alkenyl, Ph, etc.; R<sub>2</sub> = H, C<sub>1</sub>-3 alkyl, Ph, halo; R<sub>7</sub> = R<sub>2</sub>, alkenylalkenyl, alkynyl, dialkynyl, halolkynyl, alkenylalkynyl; or R<sub>2</sub> and R<sub>7</sub> form fused Ph ring, etc., with provisos] were prepared as medical and agrochem. fungicides. Thus, 3-(4-chlorobenzoyl)propionic acid (preparation given) in absolute EtOH was refluxed for 3 h with hydrazine and the dihydropyridazinone formed was N-alkynylated by 1-bromopent-2-yne to give title compound II. II at 200 ppm gave 99% control of Pyricularia oryzae on rice and at 100 ppm gave 100% control of Candida albicans.

IT 65738-56-9P 142048-58-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediate for fungicides)

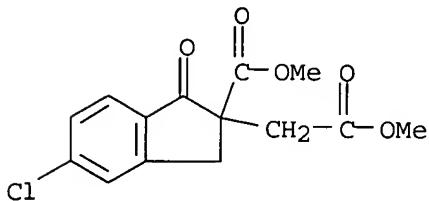
RN 65738-56-9 CAPLUS

CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester  
(9CI) (CA INDEX NAME)



RN 142048-58-6 CAPLUS

CN 1H-Indene-2-acetic acid, 5-chloro-2,3-dihydro-2-(methoxycarbonyl)-1-oxo-,  
methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:214518 CAPLUS

DOCUMENT NUMBER: 116:214518

TITLE: Preparation of arthropodicidal tetrahydropyridazinecarboxamides

INVENTOR(S): Harrison, Charles Richard; Lahm, George Philip;  
Stevenson, Thomas Martin

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: PCT Int. Appl., 166 pp.

CODEN: PIXXD2

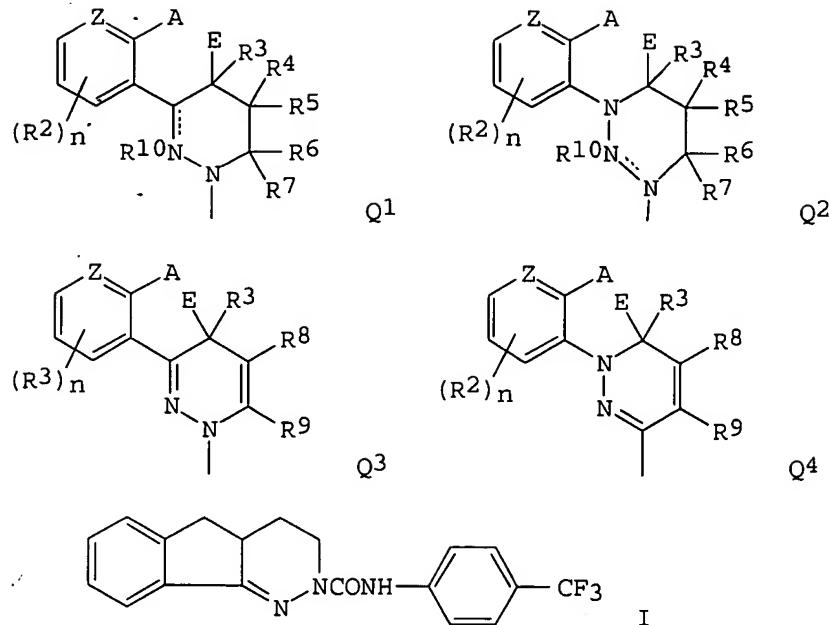
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9117983	A1	19911128	WO 1991-US2836	19910430 <--
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RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG				
AU 9178846	A1	19911210	AU 1991-78846	19910430 <--
EP 530264	A1	19930310	EP 1991-909859	19910430 <--
EP 530264	B1	19961023		
R: DE, ES, FR, GB, IT				
JP 05507087	T2	19931014	JP 1991-509824	19910430 <--
JP 3030081	B2	20000410		
CN 1057258	A	19911225	CN 1991-103767	19910510 <--
ZA 9103549	A	19921230	ZA 1991-3549	19910510 <--
US 5380718	A	19950110	US 1992-945965	19921112 <--
PRIORITY APPLN. INFO.:			US 1990-523697	A2 19900515
			US 1990-570103	A2 19900817
			WO 1991-US2836	A 19910430
OTHER SOURCE(S):	MARPAT	116:214518		
GI				



**AB** Title compds. QC(:X)NYG and QC(X1):NG [Q = Q1, Q2, Q3, Q4, wherein A = H; E = H, C1-3 alkyl, AE = V, V = (substituted) CH<sub>2</sub>, (substituted) CH<sub>2</sub>CH<sub>2</sub>, O, S, SO, etc.; G = (substituted) heterocyclyl, (substituted) (phenyl) alkyl; X = O, S, X<sub>2</sub>N, X<sub>2</sub> = (substituted) C1-3 alkyl, (substituted) PhCH<sub>2</sub>, C2-4 haloalkyl, (substituted) C3-6 cycloalkyl, HO, etc.; X<sub>1</sub> = Br, Cl, etc.; Y = H, C1-6 alkyl, (substituted) PhCH<sub>2</sub>, CHO, C2-6 alkoxyalkyl, etc.; R<sub>2</sub> = H, C1-6 alkyl, C1-6 haloalkyl, C2-6 alkenyl, etc.; R<sub>3</sub> = H, N<sub>3</sub>, O<sub>2</sub>N, halo, C1-6 alkyl, C2-6 alkenyl, heterocyclyl, etc.; R<sub>4</sub> = H, halo, C1-6 alkyl, Ph, pyridyl, etc.; R<sub>5</sub>, R<sub>7</sub> = H, C1-2 alkyl; R<sub>6</sub> = H, C1-6 alkyl, (substituted) Ph, (substituted) pyridyl, C1-3-alkyl-O<sub>2</sub>C; R<sub>4</sub>R<sub>5</sub> = R<sub>6</sub>R<sub>7</sub> = O; R<sub>8</sub> = R<sub>5</sub>; R<sub>9</sub> = H, C1-2 alkyl, C1-2 alkylcarbonyl; Z = C, N; n = 1-3; if dotted line = bond; R<sub>10</sub> is absent, if dotted line is absent, R<sub>10</sub> = H, (halo substituted) alkyl, alkylcarbonyl, cycloalkyl, alkylsulfonyl, SO<sub>2</sub>Ph] are prepared To aqueous H<sub>2</sub>SO<sub>4</sub> was added NaIO<sub>4</sub> followed by tartaric acid, and then 1-indanone and aqueous NaOH to give (2,3-dihydro-1-oxo-1-indenylidene)acetic acid, which was treated with Zn dust suspended in HOAc to give 2,3-dihydro-1-oxo-1H-indene-2-acetic acid. This was treated with H<sub>2</sub>NNH<sub>2</sub>.H<sub>2</sub>O in EtOH and refluxed for 18 h to give 2,4,4a,5-tetrahydro-3H-indeno[1,2-c]pyridazin-3-one which was treated with LiAlH<sub>4</sub> in THF, refluxed for 1 h, worked up, and treated with p-CF<sub>3</sub>C<sub>6</sub>H<sub>4</sub>NCO to give the title pyridazinecarboxamide I. The title compds. can be formulated with insecticides, fungicides, nematocides and acaricides. Application of I at 0.55 kg/ha resulted in ≥80% mortality of fall armyworm, southern corn rootworm, and boll weevil. Addition title compds. were prepared and found active.

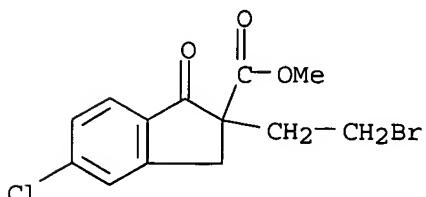
**IT** 139991-92-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

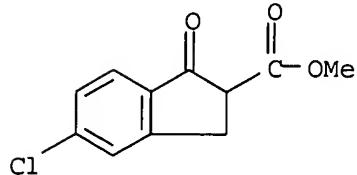
(preparation and reaction of, in preparation of insecticides)

**RN** 139991-92-7 CAPLUS

**CN** 1H-Indene-2-carboxylic acid, 2-(2-bromoethyl)-5-chloro-2,3-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



IT 65738-56-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in preparation of insecticides)  
 RN 65738-56-9 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester  
 (9CI) (CA INDEX NAME)

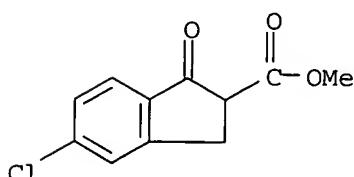


L9 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1978:104975 CAPLUS  
 DOCUMENT NUMBER: 88:104975  
 TITLE: Potential hypocholesteremic derivatives of  
 styrylacetic acid. II: cis- and  
 trans-3-Methyl-4-phenyl-3-butenoic acid  
 analogs  
 AUTHOR(S): Stratford, E. S.; Smith, L. M.; Tomecko, G. W.  
 CORPORATE SOURCE: Sch. Pharm., Univ. Connecticut, Storrs, CT, USA  
 SOURCE: Journal of Pharmaceutical Sciences (1978),  
 67(1), 80-3  
 CODEN: JPMSAE; ISSN: 0022-3549  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The synthesis and testing for in vitro cholesterol biosynthesis inhibitory activity of 2-indeneacetic acid, 2-methyl-1,2-dihydro-2-naphthoic acid, and their 5- and 7-chloro derivs., resp., are described. These compds. were prepared as trans- and cis analogs of antilipemic 3-methyl-4-phenyl-3-butenoic acid. Both series of compds. showed cholesterol biosynthesis inhibitory properties, but Cl substitution enhanced potency only in the cis-system. The findings were discussed in terms of a relationship between the cis compds. and clofibrate-type antilipemic agents.

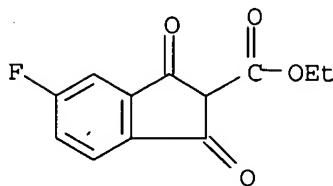
IT 65738-56-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction with Et bromoacetate)  
 RN 65738-56-9 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 5-chloro-2,3-dihydro-1-oxo-, methyl ester  
 (9CI) (CA INDEX NAME)



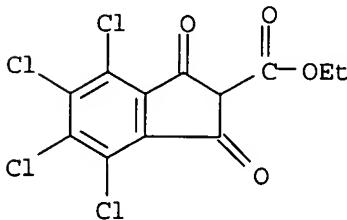
L9 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1975:86232 CAPLUS  
 DOCUMENT NUMBER: 82:86232  
 TITLE: 5-Fluoro-1,3-indandione derivatives of 5-iodo- and  
 5-fluoro-1,3-indandiones  
 AUTHOR(S): Cema, G.; Grinsteins, V.; Kalejs, U.  
 CORPORATE SOURCE: Latv. Gos. Univ. im. Stucka, Riga, USSR  
 SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija  
 (1974), (6), 711-18  
 CODEN: LZAKAM; ISSN: 0002-3248

DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI For diagram(s), see printed CA Issue.  
 AB Condensation of 4-fluorophthalic anhydride with MeCOCH<sub>2</sub>CO<sub>2</sub>Et gave 88.5% acid I, which was decarboxylated to give 63.6% 5-fluoro-1,3-indandione (II). Bromination of II gave 48% 2,2-dibromo-5-fluoro-1,3-indandione. 2-Nitroso-5-fluoro-1,3-indandione was prepared by treatment of II with NaOH followed by NaNO<sub>2</sub> and 20% H<sub>2</sub>SO<sub>4</sub>. 2-Nitro-5-fluoro-1,3-indandione was prepared in 69.1% yield by nitration of II. Reaction of II with p-RC<sub>6</sub>H<sub>4</sub>CHO (R = NO, Cl, Br, MeO, Me<sub>2</sub>N, Et<sub>2</sub>N) gave the arylideneindandiones III. Similar derivs. of 5-iodoindandione were prepared  
 IT 54746-56-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 54746-56-4 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 5-fluoro-2,3-dihydro-1,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1971:53310 CAPLUS  
 DOCUMENT NUMBER: 74:53310  
 TITLE: Condensation of dicarboxylic acid anhydrides with compounds containing active methylene groups. XV. Condensation of tetrachloro- and tetrabromophthalic anhydrides with acetoacetate  
 AUTHOR(S): Rotbergs, J.; Dervanika, I. D.; Oskaja, V.  
 CORPORATE SOURCE: Latv. Gos. Univ. im. Stucki, Riga, USSR  
 SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija (1970), (6), 699-703  
 CODEN: LZAKAM; ISSN: 0002-3248  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 GI For diagram(s), see printed CA Issue.  
 AB I (R = Cl, Br; X = O) condensed with AcCH<sub>2</sub>CO<sub>2</sub>Et in Ac<sub>2</sub>O containing Et<sub>3</sub>N, forming the corresponding I (X = CHCO<sub>2</sub>Et) (II). Heating II with Ac<sub>2</sub>O containing H<sub>2</sub>SO<sub>4</sub> gave I (X = CH<sub>2</sub>) (III). I (X = C:CHC<sub>6</sub>H<sub>4</sub>R'-p where R' = H, NO<sub>2</sub>) and IV were prepared from III by treatment with R'C<sub>6</sub>H<sub>4</sub>CHO and HONH.HCl, resp.  
 IT 30575-67-8P 30575-68-9P 30575-69-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 30575-67-8 CAPLUS  
 CN 1H-Indene-2-carboxylic acid, 4,5,6,7-tetrachloro-2,3-dihydro-1,3-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



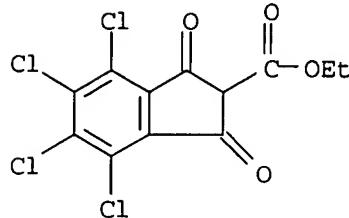
RN 30575-68-9 CAPLUS

CN 2-Indancarboxylic acid, 4,5,6,7-tetrachloro-1,3-dioxo-, ethyl ester,  
compd. with triethylamine (1:1) (8CI) (CA INDEX NAME)

CM 1

CRN 30575-67-8

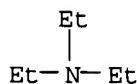
CMF C12 H6 Cl4 O4



CM 2

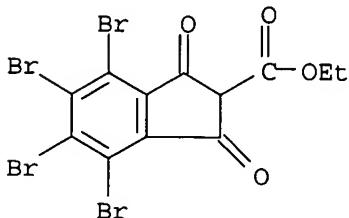
CRN 121-44-8

CMF C6 H15 N



RN 30575-69-0 CAPLUS

CN 2-Indancarboxylic acid, 4,5,6,7-tetrabromo-1,3-dioxo-, ethyl ester (8CI)  
(CA INDEX NAME)



L9 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1970:132349 CAPLUS

DOCUMENT NUMBER: 72:132349

TITLE: Condensation of dicarboxylic acid anhydrides  
with compounds containing active methylene groups.

VIII. 5-bromo-1,3-indandione and its derivatives

Cema, G.; Rotbergs, J.; Oskaja, V.

Latv. Gos. Univ. im. Stucki, Riga, USSR

AUTHOR(S): Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija  
CORPORATE SOURCE: (1969), (3), 329-35

SOURCE: CODEN: LZAKAM; ISSN: 0002-3248

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

AB The title compds. are prepared Thus, 10 g I and 1.6 g Na were treated with 25 ml AcOEt to yield 63% II, which, treated with 5% H<sub>2</sub>SO<sub>4</sub>, gave III. II (3.2 g) in 230 ml hot H<sub>2</sub>O with 21 ml 1:1 HCl gave 1.35 g (59.5%) IV, m. 157-60°. 4-Bromophthalic anhydride (V) (4.54 g) and 2.6 g AcCH<sub>2</sub>CO<sub>2</sub>Et in 20.4 g Ac<sub>2</sub>O with 6.1 g Et<sub>3</sub>N gave an intermediate (VI), m. 85-90°, of unde td. structure, which, dissolved in 0.25% NaOH and

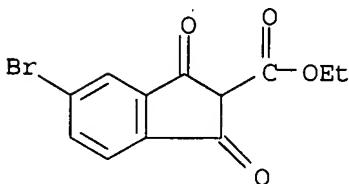
treated with 1:1 HC l, gave III. VI (1 g), dissolved in 200 ml 0.25% NaOH and acidified with 1:1 HCl gave 64.8% IV. IV is in the diketo form. 2-Nitroso- (m. 211-13°) and 2-nitro- (m. 84°) derivs. of IV were prepared Benzylidene derivs. of IV were obtained from 0.004 mole IV and 0.004 mol ole benzaldehyde. Thus prepared were VII (R and m.p. given): p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH, 257-9°; p-BrC<sub>6</sub>H<sub>4</sub>CH, 214-16°; p-ClC<sub>6</sub>H<sub>4</sub>CH, 190-5°; p-MeO-C<sub>6</sub>H<sub>4</sub>CH, 159 -61°; PhCH, 170-1°; 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH, 231-3°; p-Et<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH, 160-2°.

IT 27611-40-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 27611-40-1 CAPLUS

CN 2-Indancarboxylic acid, 5-bromo-1,3-dioxo-, ethyl ester (8CI) (CA INDEX NAME)



L9 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1970:121216 CAPLUS

DOCUMENT NUMBER: 72:121216

TITLE: Condensation of dicarboxylic acid anhydrides  
with compounds containing active methylene groups.  
IX. Condensation of 3- and 4-iodophthalic

acid anhydrides with acetoacetic ester  
AUTHOR(S): Rotbergs, J.; Cema, G.; Oskaja, V.  
CORPORATE SOURCE: Latv. Gos. Univ. im. Stucki, Riga, USSR  
SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija  
(1969), (3), 336-9  
CODEN: LZAKAM; ISSN: 0002-3248

DOCUMENT TYPE: Journal

LANGUAGE: Russian

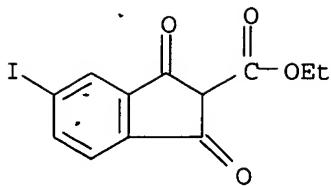
AB 3-Iodophthalic anhydride (5.48 g) (I) and 2.6 g AcCH<sub>2</sub>CO<sub>2</sub>Et (II) in 30.6 g Ac<sub>2</sub>O with 6.1 g EtN<sub>3</sub> gave 5.34 g yellow product, which, (1 g) in 500 ml hot H<sub>2</sub>O acidified with 1:1 HCl yielded 27.2% Et 4-ido-1,3-indandione-2-carboxylate, m. 133-4° (decomposition). Similarly prepared was Et 5-ido-1,3-indandione-2-carboxylate, m. 105-6° (decomposition) from 4-iodophthalic anhydride. The unpurified product of the condensation of I with II (1 g) was boiled with 200 ml H<sub>2</sub>O and 40 ml concentrated HCl until CO<sub>2</sub> evolution ceased, to give (49.1%) 4-ido-1,3-indandione (III), m. 147-8° (decomposition). 2-Benzal-4-ido-1,3-indandione, m. 153-5°, and III dioxime, m. 268-70°, were also prepared. Similarly were obtained 5-ido-1,3-indandione (IV), m. 171-2° (decomposition), 2-benzal-5-ido-1,3-indandione, m. 158-60°, and IV dioxime, m. 252-5°. The 2 ir bands in the region 1688-1739 cm<sup>-1</sup> prove III, IV, and their 2-benzal derivs. are in the diketo form.

IT 27117-90-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 27117-90-4 CAPLUS

CN 2-Indancarboxylic acid, 5-ido-1,3-dioxo-, ethyl ester (8CI) (CA INDEX NAME)



L9 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1969:37507 CAPLUS

DOCUMENT NUMBER: 70:37507

TITLE: Condensation of dicarboxylic acid anhydrides with compounds containing active methylene groups.

VII. 5-Chloroindan-1,3-dione and its derivatives

Cema, G.; Rotbergs, J.; Oskaja, V.

Latv. Gos. Univ. im. Stucka, Riga, USSR

SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija (1968), (4), 466-70

CODEN: LZAKAM; ISSN: 0002-3248

DOCUMENT TYPE: Journal

LANGUAGE: Russian

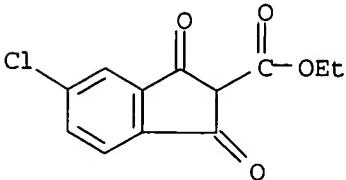
AB 4-Chlorophthalic acid (I) was condensed with AcCH<sub>2</sub>CO<sub>2</sub>Et (II) in Ac<sub>2</sub>O containing NEt<sub>3</sub> and the condensate treated with dilute HCl to obtain Et 5-chloro-1,3-indandione-2-carboxylate (III). More vigorous treatment of the condensate with HCl gave 5-chloro-1,3-indandione (IV). Thus, 15.15 g. NEt<sub>3</sub> was added to a mixture of 9.13 g. I and 6.5 g. II in 30.6 g. Ac<sub>2</sub>O. After 24 hrs. at room temperature the mixture was poured onto ice and 35 ml. concentrated HCl. An oil separated and crystallized to a brown intermediate m. apprx. 105°. This (4 g.) in 200 ml. 1% NaOH treated dropwise with 1:1 HCl gave 2.8 g. III, m. 109-10°. When 1 g. of the brown intermediate was boiled with 200 ml. H<sub>2</sub>O and 40 ml. concentrated HCl until half dissolved and the mixture filtered rapidly, there separated from the filtrate 0.39 g. of IV, m. 137-8°. Cl with III in CCl<sub>4</sub> gave 0.83 g. Et 2,5-dichloro-1,3-indandione-2-carboxylate (V), m. 67-8°. III (1.8 g.) with 60 ml. M solution of Br in glacial HOAc gave 3.15 g. 2,2-dibromo-5-chloro-1,3-indandione, m. 146-7° (VI). Derivs. of IV prepared were: dioxime C<sub>9</sub>H<sub>7</sub>O<sub>2</sub>N<sub>2</sub>Cl, m. 237-8° (decomposition), semicarbazone, m. apprx. 280° (decomposition); thiosemicarbazone, m. 230° (decomposition). Nitrosation of IV yielded the 2-nitroso derivative, C<sub>9</sub>H<sub>4</sub>O<sub>3</sub>NC<sub>1</sub>, in 2 forms, yellow from C<sub>6</sub>H<sub>6</sub>, m. 178-83° and green from 50% aqueous alc., m. 192-4°. IV with fuming HNO<sub>3</sub> yielded the 2-nitro derivative, C<sub>9</sub>H<sub>4</sub>O<sub>4</sub>NC<sub>1</sub>·3H<sub>2</sub>O. Crystals of 2-nitro-4-chloro-1,3-indandione also contain 3 moles H<sub>2</sub>O. Other derivs. of IV prepared were: 2-benzylidene-5-chloro-1,3-indandione, m. 149-53°; 2-(4-nitrobenzylidene) m. 224-6°; 2-(4-bromobenzylidene)-, m. 227-9°; 2-(4-chlorobenzylidene)-(VII), m. 216-18°; 2-(4-methoxybenzylidene)-, m. 181-3°, and 2-(4-dimethylaminobenzylidene)-(VIII), m. 208-9°. The 1st 4 are yellow, VII is orange, and VIII red. Ir absorption data are given.

IT 22018-97-9P 22018-98-0P

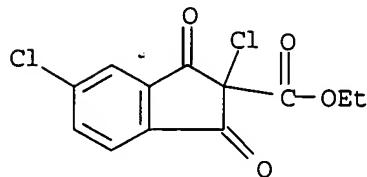
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 22018-97-9 CAPLUS

CN 2-Indancarboxylic acid, 5-chloro-1,3-dioxo-, ethyl ester (8CI) (CA INDEX NAME)



RN 22018-98-0 CAPLUS  
CN 2-Indancarboxylic acid, 2,5-dichloro-1,3-dioxo-, ethyl ester (8CI) (CA  
INDEX NAME)



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L9 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1961:96341 CAPLUS  
DOCUMENT NUMBER: 55:96341  
ORIGINAL REFERENCE NO.: 55:18126b-d  
TITLE: Dyeing hydrophobic fibers with disperse dyes  
INVENTOR(S): Merian, Ernst; Senn, Otto  
PATENT ASSIGNEE(S): Sandoz Ltd.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1090172	-----	19601006	DE	<--
US 3093437	-----	1963	US	<--

AB A process is described for dyeing hydrophobic fibers, particularly poly(ethylene terephthalate), with disperse dyes to give yellow and orange colors of good light-, sublimation-, thermal fixation-, and perspiration fastness; at the same time good reserve of wool, cotton, and viscose is obtained when dyeing mixed fabrics. For this purpose, dyes are used which are obtained by coupling 1 mole diazotized nitroanilines having a substituent in the 4-position making them H<sub>2</sub>O-soluble, with 1 mole of 1,3-indandione, chloro-1,3-indandione, or 5,6-dichloro-1,3-indandione, or derivs. of these compds., such as 1,3-indandione-2-carboxylic acid or its alkyl esters. The resulting dyes are dissolved in finely divided form in a H<sub>2</sub>O-miscible solvent, the solution poured into H<sub>2</sub>O, the product filtered, washed, and mixed with a dispersing agent. The paste obtained can be dried at ordinary or reduced pressure or by atomizing. The polyester fiber is dyed by known methods in the presence of a carrier at 80-100°, or in the absence of a carrier at 100-140° under

pressure.

IT 99979-36-9, 2-Indancarboxylic acid, 5,6-dichloro-1,3-dioxo-, ethyl ester

(dyes from and dyeing hydrophobic fibers therewith)

RN 99979-36-9 CAPLUS

CN 2-Indancarboxylic acid, 5,6-dichloro-1,3-dioxo-, ethyl ester (6CI) (CA  
INDEX NAME)

